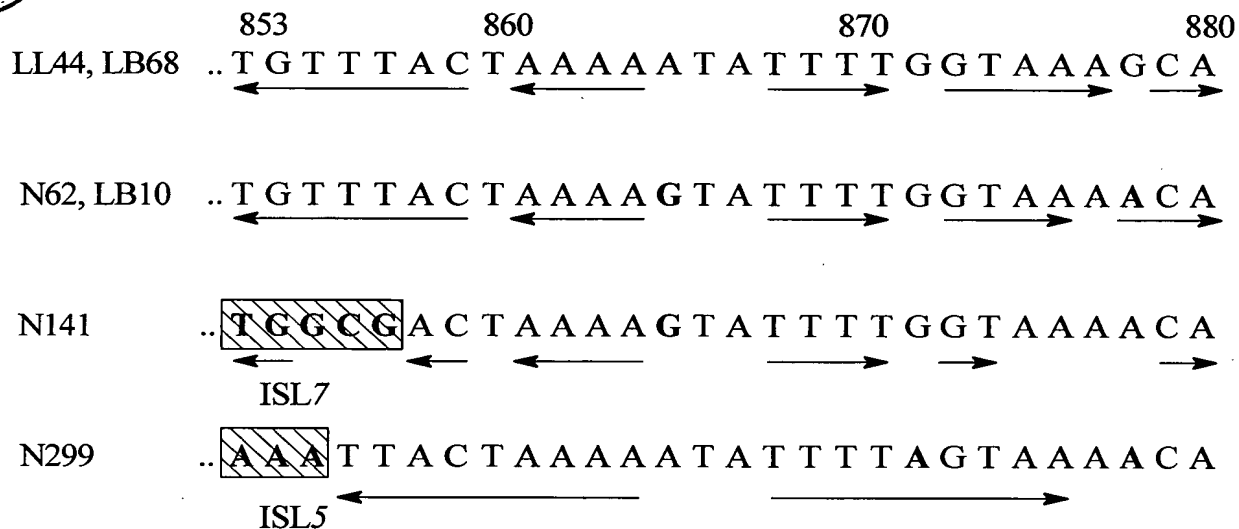


# FIG. 1



## O1



## O2





FIG. 2

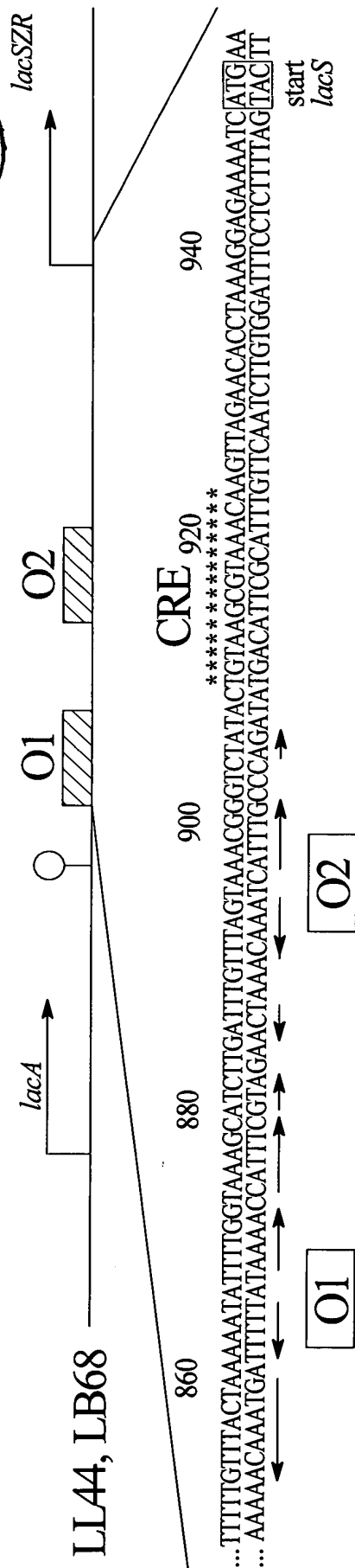
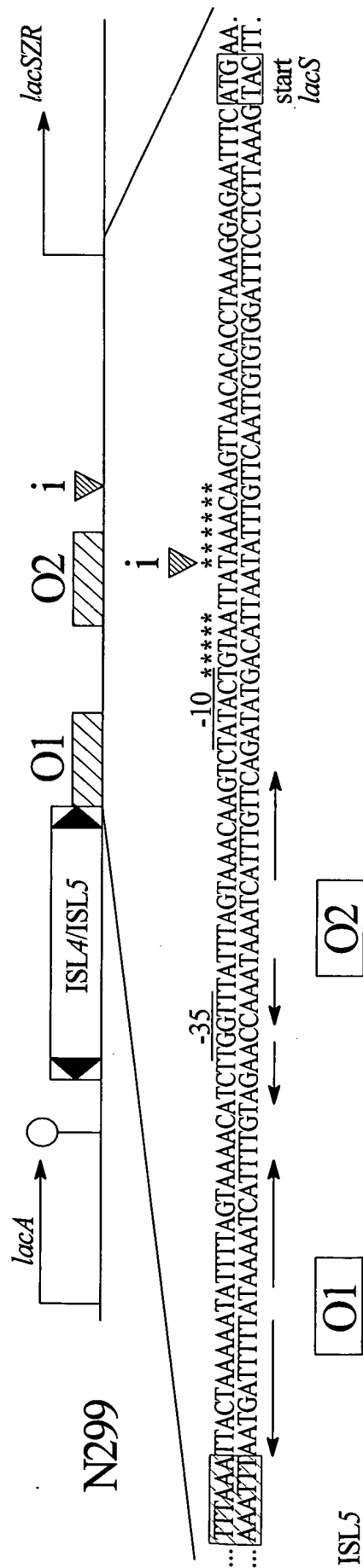


FIG. 3



## FIG. 4

1 GAATTTTGTCTGGATGCTCAGGAAGCCCGCCAGCTCAAGCTGGTGATTGAGCCACTTTTT  
stop lacZ

61 ACTGAA[TAA]TGCTACAATTGACTTAACAGCATAAAATTTTAGTAAAAGCGAGTGAAGAAG  
RBS

121 [ATG]GCAACGATCAGAGAAGTGGCCAAGGCAGCCGGCGTGTGCGCCAGCGACGGTTTCCCGG  
1 M A T I R E V A K A A G V S P A T V S R  
helix turn helix

181 GTCTTGAACATATGACCAGACCCTGTCGGTCAATGAGGCAACGCGGCAGAAAGATATTCAAA  
21 V L N Y D Q T L S V N E A T R Q K I F K

241 ACTGCTGAAGCCATGCACTACCATAAGAGCCGGAAGACCAGAAAGAGCAAGCAAAAAGCGC  
41 T A E A M H Y H K S R K T R K S K Q K R

301 CTGGCGATCTGCCTGTGGTGTGACCAAGACCAGGAGATCAAGGACCTCTATTACTATTCA  
61 L A I C L W C D Q D Q E I K D L Y Y Y S

361 ATCAGAACCGCGCGCAAGCAGAGGCCAAGAAGCAGGGACTTGAAAGCCAGGTCATTTAT  
81 I R T S A Q A E A K K Q G L E S Q V I Y

421 CCGGCTGATCCTTTGCCCGATCCAGCTGCTTTAAGCGGGATTATCATGATTGGCTACCAG  
101 P A D P L P D P A A L S G I I M I G Y Q

481 CAGTATTCGCCAGACCGCTTGAATGAAGTCAAAAAGTCTGGCCTGCCCTGGTCTTTGTC  
121 Q Y S P D R L N E V K K S G L P L V F V

541 GATACTGACACCTTAAAATTGGGTTACTGCTCAGTTGTGGCTGACTTTGGCCAGGCCATG  
141 D T D T L K L G Y C S V V A D F G Q A M

601 CAGGAGGCGCTAGAGGTCTTCTGGGGGCAGGGCAGGGAGCGGATCGCCCTTTTGGATGGT  
161 Q E A L E V F W G Q G R E R I A L L D G

661 GATTTGGACAGTAATTTTGATAAAAACAACCTTGGTCGACTTCCGCTTCCGCGATTATAAG  
181 D L D S N F D K N N L V D F R F R D Y K

▼

721 AAGAGCCTCGCGGCCCGCGGCCAGTACGACCCGGACTTAGTCTATGTTGGAAACTTCACT  
201 K S L A A R G Q Y D P D L V Y V G N F T

781 CCGCAATCTGGCTATGAAGCCATTAAAGAAGCTCTTAAGTCCGGCTCCTTCCCGAAAGCC  
221 P Q S G Y E A I K E A L K S G S F P K A

841 TTGATTGCGGCTAATGACGCCATGGCTATTGGAGCATTGAAGGCCTTTAAAGAAGCTGGA  
241 L I A A N D A M A I G A L K A F K E A G

901 ATTAAGTCCAGAGGACGTCAGTCTGATTCTTTTAATGACACAACGGCAGCAGAATTT  
261 I K V P E D V S L I S F N D T T A A E F

961 GCCAACCCAGCCTTGACTAGCGTACATGTAGAGAC[CAG]CAGATGGGCCGAGCCAGCGTC  
281 A N P A L T S V H V E T Q Q M G R A S V

1021 AAGGTCATGAAAGACCTGCTGGATGATGATGAAGCCGGCACTTACAAGGTCACCTTCCCA  
301 K V M K D L L D D D E A G T Y K V T F P

1081 ACAAACTCGTTTACCGGGAATCTTGCCCAAAAGCATAAGGGCATAGAGCATAATAACAG  
321 T K L V Y R E S C P K A \*

1141 CAAAGAAATAGCTTGGAGATTGATTTTCTCCAAGCTATTTTTCGTATATA[TTA]TGGCTGC  
stop asn4

1201 ATTCTGTTGATCATTCTTGGGAATGGGACAGCTTCACGAACGTGGTCCAGCTTGCAGATC  
1261 CAGGCAATGACCCGTTCAAAG

FIG. 5

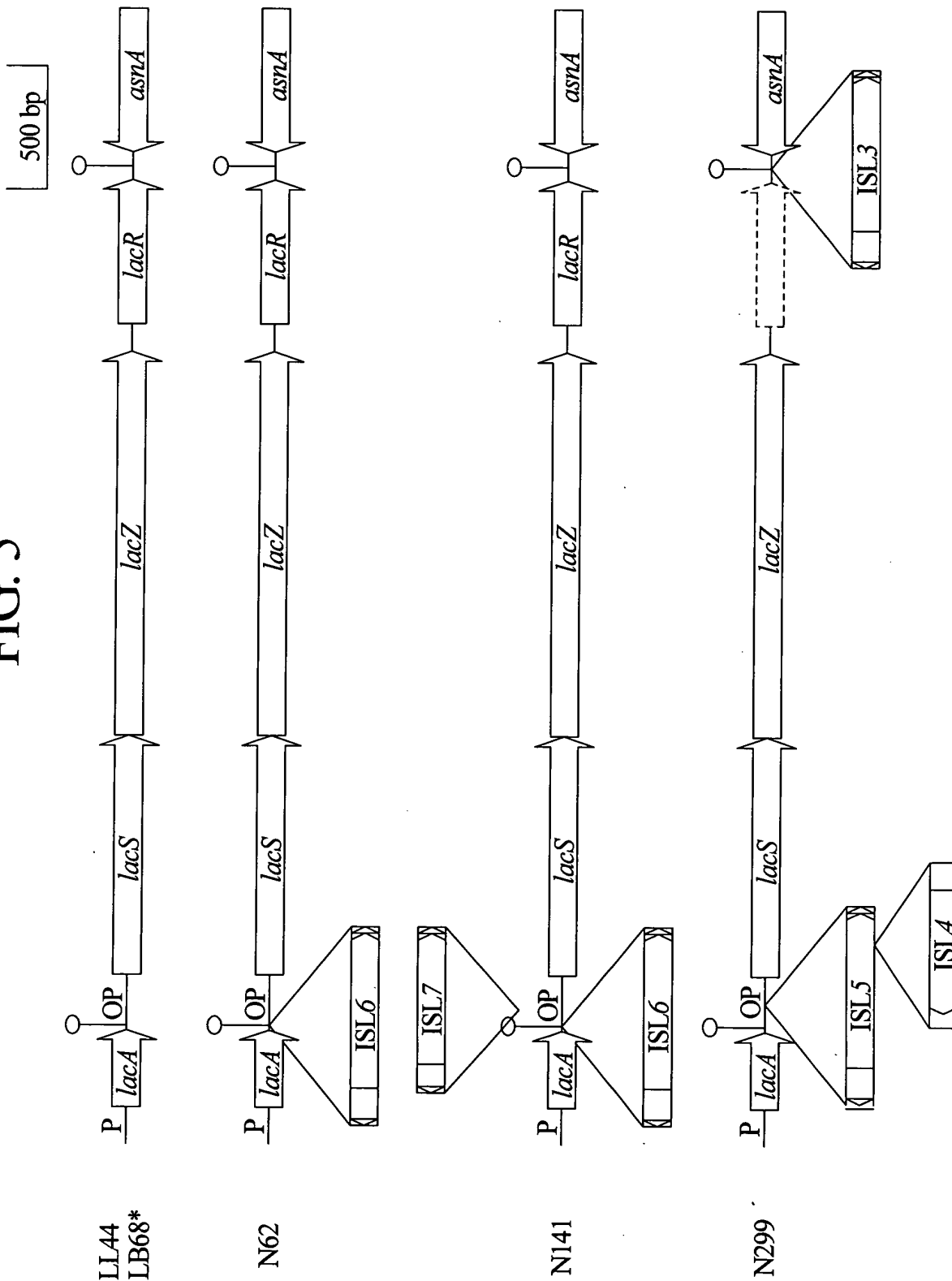


FIG. 6

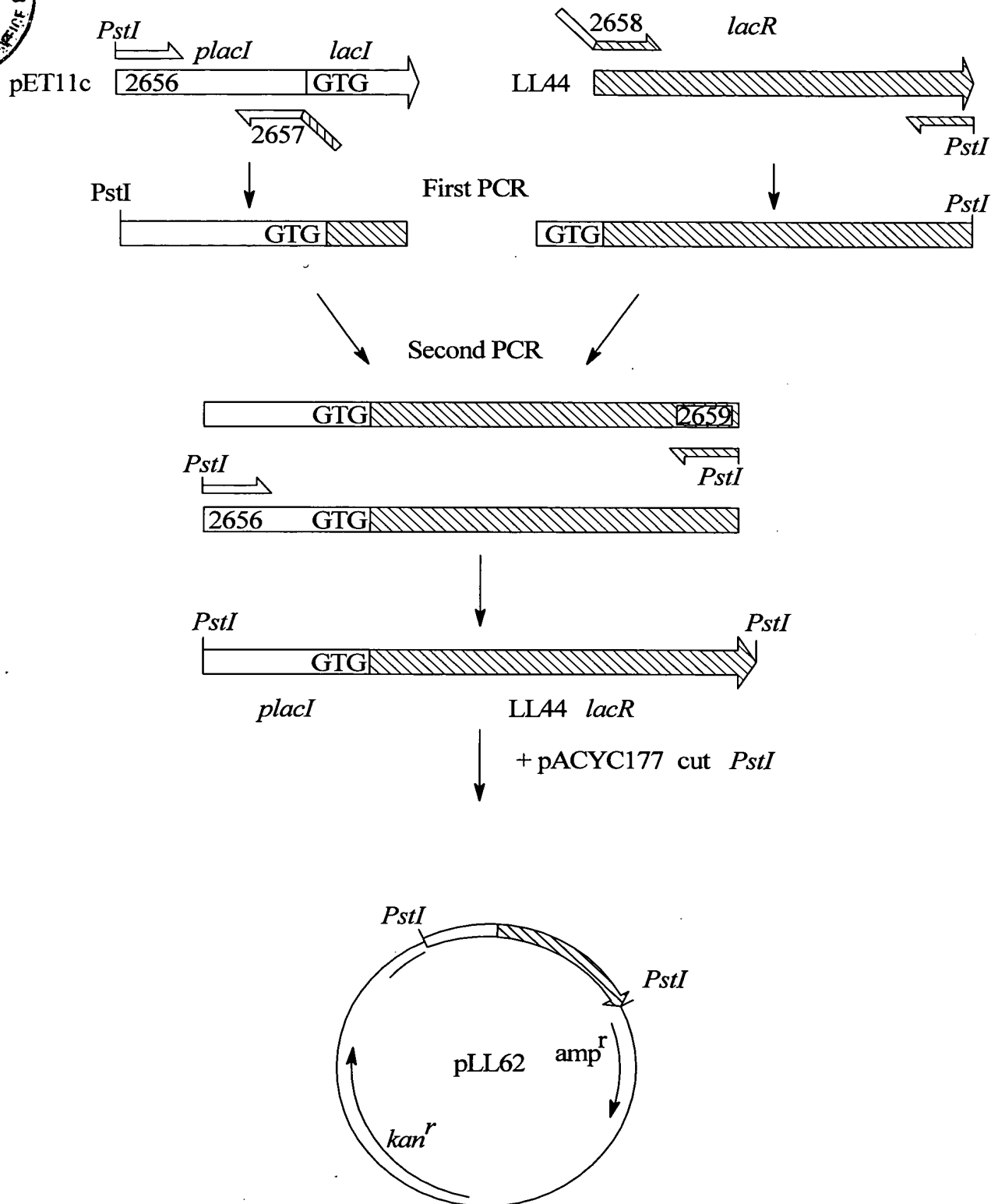
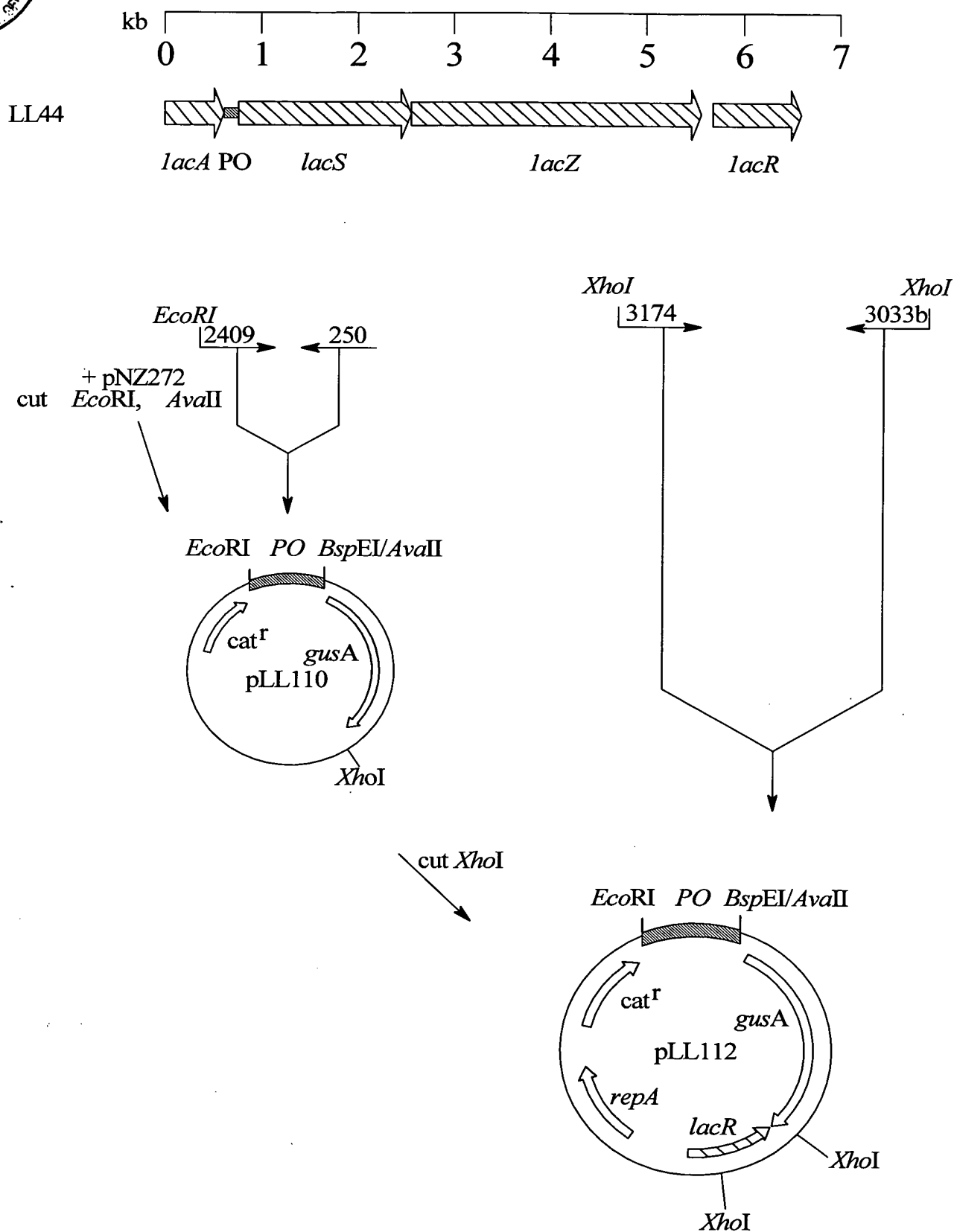


FIG. 7



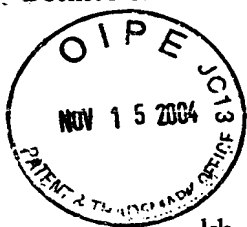


FIG. 8

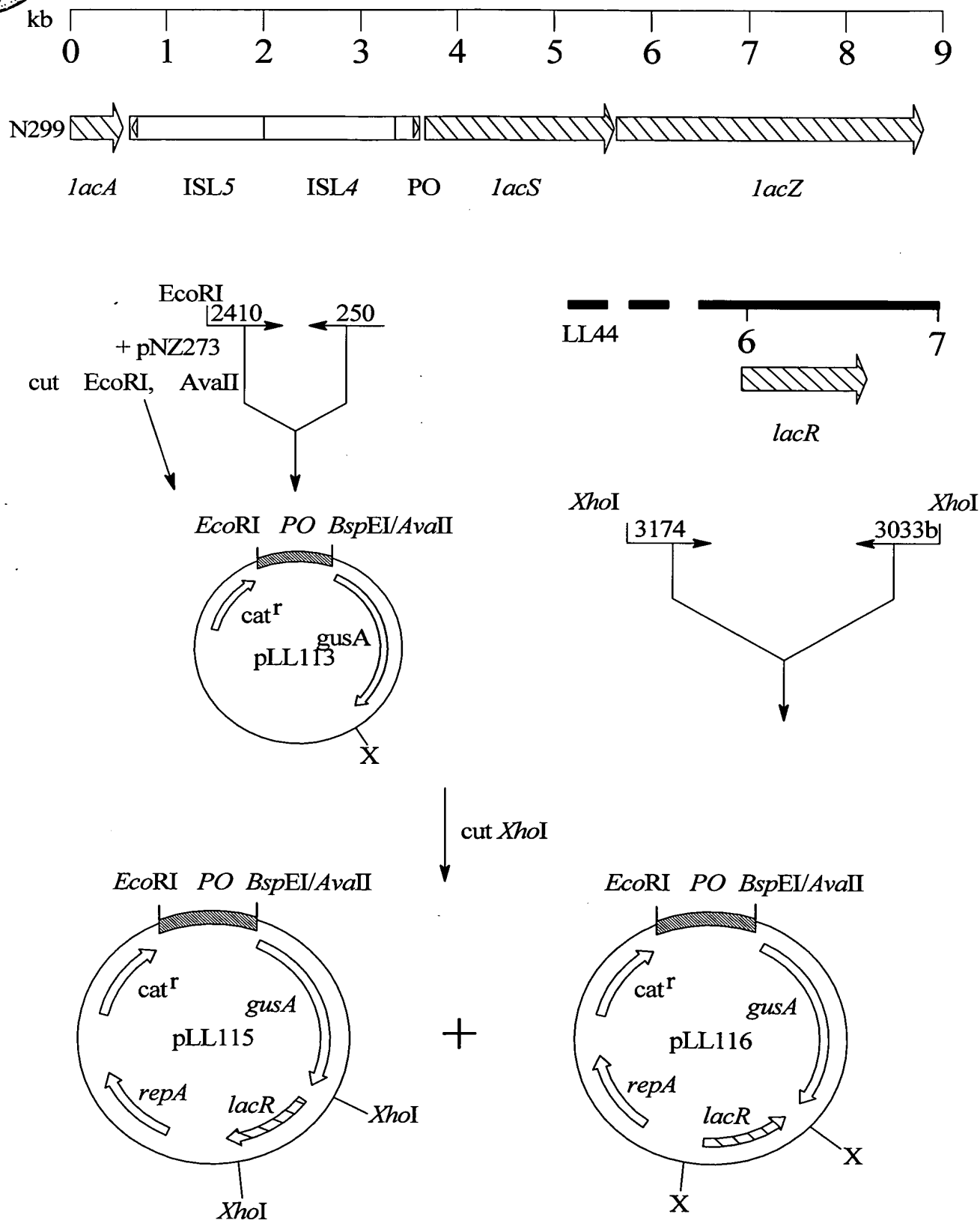
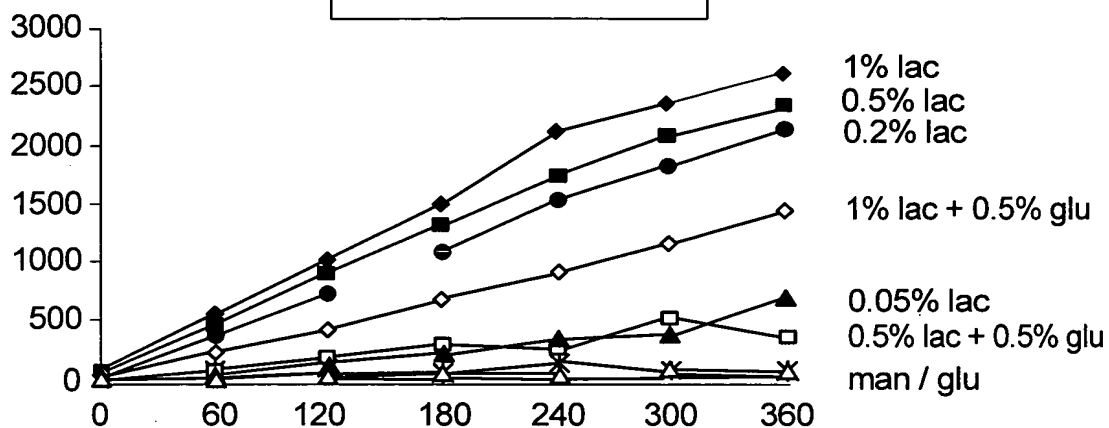


FIG. 9

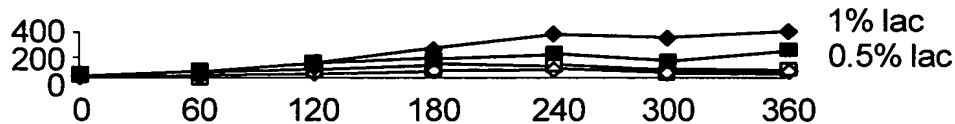
BEST AVAILABLE COPY

Bele-glucuronidase activity (Units/mg prot x 10<sup>-4</sup>)

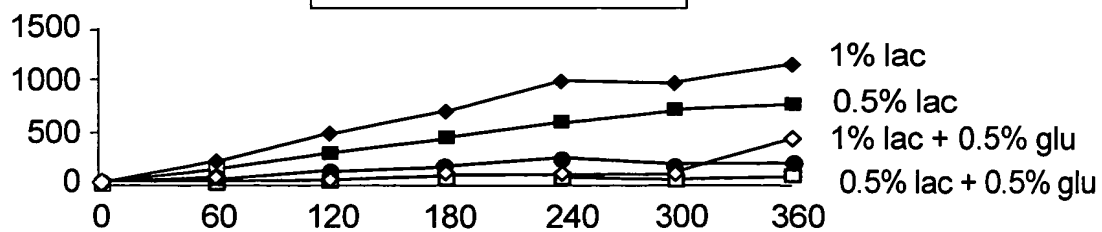
pLL112  
LL44 prom + *lacR* ←



pLL115  
N299 prom + *lacR* →



pLL116  
N299 prom + *lacR* ←





Title: THE LACTOSE OPERON OF LACTOBACILLUS DELBRUEKII AND ITS USE FOR CONTROLLING GENE TRANSCRIPTION AND/OR EXPRESSION IN BACTERIAL CELLS

Inventor: Germond, J. et al.

App. No.: 10/019,817

Docket No.: 112843-039 Replacement Drawing

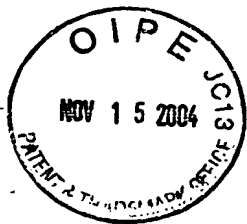
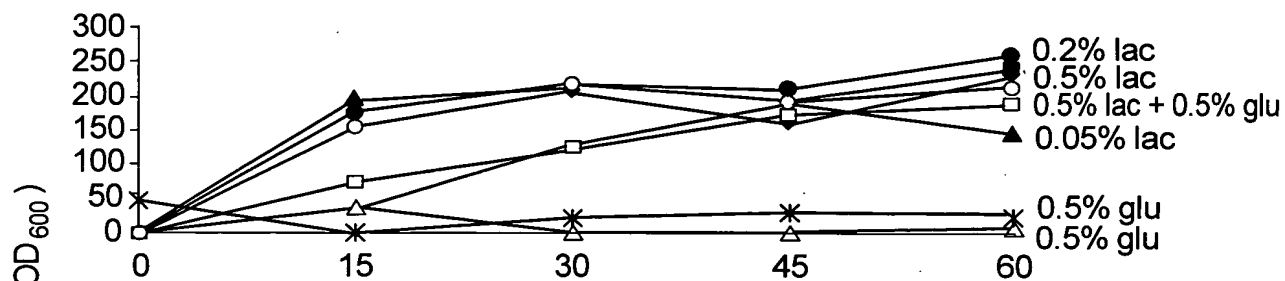


FIG. 10

LL44



N299

